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(54) Title: PROCESS FOR THE PRODUCTION OF MULTI-LAYER COATINGS

(57) Abstract: A process for the production of special effect multi-layer coatings, comprising the successive steps: (1) applying a 10 to 30 µm thick base coat layer onto a substrate provided with an EDC primer, (2) applying a clear coat layer onto the base coat layer, (3) jointly curing the base coat and clear coat layers, wherein the base coat layer is applied in a first layer and in a second layer; the first layer comprises a modified water-borne base coat produced by mixing an unmodified water-borne base coat with an admixture component and the second layer comprises the unmodified water-borne base coat, wherein the unmodified water-borne base coat has a ratio by weight of pigment content to resin solids content of 0.05:1 to 0.6:1 and wherein the pigment content of the unmodified water-borne base coat comprises at least one metal flake pigment having a thickness of 10 to 100 nm corresponding to a proportion of 0.1 to 5 wt.%, relative to the resin solids content of the unmodified water-borne base coat and at least one additional special effect pigment and wherein the composition of the pigment content is such that the UV light transmission through the base coat layer formed of the first and second layers is less than 0.1 % in the wavelength range of from 290 to 380 nm and less than 0.5 % in the wavelength range of from 380 to 400 nm.



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